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EXAMINER

LUONG, VINH

ART UNIT PAPER NUMBER

3682

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/681,441

Applicant(s)

FALL, PETER

Examiner

Vinh T Luong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



Vinh T. Luong  
Primary Examiner

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01162004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Attachment.

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1. The Amendment filed on May 7, 2004 has been entered.
2. The drawings were received on May 7, 2004. These drawings are unacceptable by the Examiner because the drawing correction does not comply with the new rules set forth in the Information on How to Effect Drawing Changes below. For example, Applicant does not submit replacement drawing sheets which incorporate the desired changes, comply with 37 CFR 1.84 and has an identification in the top margin as "Replacement Sheet."

3. **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

**Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, Applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless Applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

**Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

**Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

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If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

4. The *original* drawings are objected to because each part of the invention, such as, the vehicle cab space in claims 1, 8, and 18, and the telescoping member in claims 11-13 should be designated by a referential numeral or character. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. See Information on How to Effect Drawing Changes above.

5. The *original* drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed features such as the vehicle cab space in claims 1, 8, and 18; and the telescoping member in claims 11-13 must be shown or the features canceled from the claims. No new matter should be entered. See Information on How to Effect Drawing Changes above.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 1-3, 5, and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayer et al. (German OS No. 31 40329 A1 cited by Applicant).

Regarding claim 1, Bayer teaches a pedal arrangement in a vehicle cab space (see Attachment), said arrangement comprising:

a support 26 fixed in the cab space (Fig. 2);

at least one pedal arm 22 having two ends (at 18 and 22 in Fig. 1), wherein the pedal arm 22 is journaled in the support 26 for pivoting about a pivot axis 24 spaced between the two ends of the pedal arm 22;

a foot plate (unnumbered, Att.) fixed to a first portion (at 22 in Fig. 1) of the pedal arm 22 on one side of the pivot axis;

a motion-transmitting element 10 disposed *partially* within the cab space, wherein the motion-transmitting element 10 is joined firstly to a second portion 18 of the pedal arm 22 on the other side of the pivot axis 24 from the foot plate and wherein the motion-transmitting element 10 is joined secondly to a pivotally mounted lever 4 that is configured so that pivotation thereof actuates an operating device 2; and

wherein the motion-transmitting element 10 is disposed so that the distance between the motion-transmitting element's respective attachment points (Att.) to the pedal arm 22 and the lever 4 is maintained at least substantially constant when there is a tensile force on the element 10 (i.e., when the foot plate is moved downwardly as shown by solid line position in Fig. 1) and is allowed to be nonfixedly shortened when there is compressive force on the

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element 10 (i.e., when the foot plate is moved upwardly as shown in dashed line position in Fig. 1); and

wherein the motion-transmitting element 10 is rigidly fixed to at least one of the pedal arm 22 and the lever 4, and is pivotally joined to the other of the pedal arm 22 and the lever 4.

Bayer teaches the invention substantially as claimed. However, Bayer's motion transmitting element 10 is disposed *partially instead of wholly* within the cab space. See English translation attached.

It is common knowledge in the art to rearrange Bayer's motion transmitting element to be disposed *wholly instead of partially* within the cab space in order to cause a swiveling of the pedal toward the front wall, thus away from the foot space at the front of the vehicle to decrease the likelihood of injuries to the feet of the driver. See evidence, such as, US Patent No. 6,082,219 cited by Applicant and legal precedents about rearrangement of parts in MPEP § 2144.04. The rearrangement of Bayer's motion transmitting element would have been a matter of choice in design since the claimed structures and the function they perform are the same as the prior art. *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995) citing *In re Gal*, 980 F.2d 717, 25 USPQ2d 1076, 1078 (Fed. Cir. 1992).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange Bayer's motion transmitting element to be disposed *wholly instead of partially* within the cab space in order to cause a swiveling of the pedal toward the front wall, thus away from the foot space at the front of the vehicle to decrease the likelihood of injuries to the feet of the driver as taught or suggested by common knowledge in the art.

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Regarding claim 2, the motion-transmitting element is an elongated flexible element 10.

Regarding claim 3, the motion-transmitting element is a metal cable 10.

Regarding claim 5, the motion-transmitting element 10 is rigidly fixed both to the pedal arm 22 and to the lever 4.

Regarding claim 8, Bayer teaches a brake pedal arrangement in a vehicle cab space, said arrangement comprising:

a brake pedal arm 22 pivotally connected to the vehicle at a pivot point 24 located on the brake pedal arm 22, the pivot point 24 being positioned between an upper end 18 and a lower end (at 22 in Fig. 1) of the brake pedal arm 22; and

a motion-transmitting element 10 disposed *partially* within the cab space and being connected between the brake pedal arm 22 and a pedal actuated operating device 4, 2, the motion-transmitting element 10 supporting tensile forces imposed thereupon (*i.e.*, when the foot plate is moved downwardly as shown by solid line position in Fig. 1), and non-fixedly collapsing under compressive forces imposed thereupon (*i.e.*, when the foot plate is moved upwardly as shown in dashed line position in Fig. 1).

It is common knowledge in the art to rearrange Bayer's motion transmitting element to be disposed *wholly instead of partially* within the cab space in order to cause a swiveling of the pedal toward the front wall, thus away from the foot space at the front of the vehicle to decrease the likelihood of injuries to the feet of the driver. See evidence, such as, US Patent No. 6,082,219 cited by Applicant and legal precedents about rearrangement of parts in MPEP § 2144.04. The rearrangement of Bayer's motion transmitting element would have been a matter

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of choice in design since the claimed structures and the function they perform are the same as the prior art. *In re Chu, supra*.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange Bayer's motion transmitting element to be disposed *wholly instead of partially* within the cab space in order to cause a swiveling of the pedal toward the front wall, thus away from the foot space at the front of the vehicle to decrease the likelihood of injuries to the feet of the driver as taught or suggested by common knowledge in the art.

Regarding claim 9, the motion-transmitting element comprises a cable 10.

Regarding claim 10, the motion-transmitting element comprises a bendable member 10.

Regarding claim 11, the motion-transmitting element 10 comprises a telescoping member since the element 10 is slid back and forth (telescope) within another element, i.e., a conduit 12.

Regarding claim 12, the telescoping member 10 is pivotally connected to the brake pedal arm 22.

Regarding claims 13 and 15, claims 13 and 15 are drawn to Applicant's embodiment of Fig. 2. Bayer substantially teaches Applicant's embodiment in Fig. 1. Applicant explicitly admits that Applicant's embodiment of Fig. 1 and Applicant's embodiment of Fig. 2 are obvious variants in Paper No. 10. See fifth paragraph on page 2 of the restriction on August 21, 2002, *In re Lee*, 199 USPQ 108 (Comm'r Pat. 1978), MPEP 803, and cases cited in *Anything You Say Can Be Used Against You*, Lance Leonard Barry, May 2000, JPTOS, Volume 82, No. 5, page 347.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to weld at least one end of the telescoping member (motion transmitting



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element) of Bayer to the brake pedal arm as explicitly admitted by the Applicant that Applicant's welding embodiment of Fig. 1 is an obvious variant of Applicant's embodiment of Fig. 2.

Regarding claim 14, the motion-transmitting element 10 is fixed at least at one end thereof between the brake pedal arm 22 and the pedal actuated operating device 2, 4.

Regarding claim 16, the motion-transmitting element 10 is pivotally connected at least at one end thereof between the brake pedal arm 22 and the pedal actuated operating device 2, 4.

Regarding claim 17, the pedal actuated operating device comprises a pressure actuated servo unit 2 for affecting brake pressure application.

9. Claims 1-3, 5, and 8-17 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Bayer et al. (German OS No. 31 40329 A1 cited by Applicant) in view of Wolpert (US Patent No. 6,082,219).

Regarding claim 1, Bayer teaches a pedal arrangement in a vehicle cab space (see Attachment), said arrangement comprising:

- a support 26 fixed in the cab space (Fig. 2);

- at least one pedal arm 22 having two ends (at 18 and 22 in Fig. 1), wherein the pedal arm 22 is journaled in the support 26 for pivoting about a pivot axis 24 spaced between the two ends of the pedal arm 22;

- a foot plate (unnumbered in Att.) fixed to a first portion (at 22 in Fig. 1) of the pedal arm 22 on one side of the pivot axis;

- a motion-transmitting element 10 disposed *partially* within the cab space, wherein the motion-transmitting element 10 is joined firstly to a second portion 18 of the pedal arm 22 on the other side of the pivot axis 24 from the foot plate and wherein the motion-transmitting

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element 10 is joined secondly to a pivotally mounted lever 4 that is configured so that pivotation thereof actuates an operating device 2; and

wherein the motion-transmitting element 10 is disposed so that the distance between the motion-transmitting element's respective attachment points (Att.) to the pedal arm 22 and the lever 4 is maintained at least substantially constant when there is a tensile force on the element 10 (i.e., when the foot plate is moved downwardly as shown by solid line position in Fig. 1) and is allowed to be nonfixedly shortened when there is compressive force on the element 10 (i.e., when the foot plate is moved upwardly as shown in dashed line position in Fig. 1); and

wherein the motion-transmitting element 10 is rigidly fixed to at least one of the pedal arm 22 and the lever 4, and is pivotally joined to the other of the pedal arm 22 and the lever 4.

Bayer teaches the invention substantially as claimed. However, Bayer's motion transmitting element 10 is disposed *partially instead of wholly* within the cab space. See English translation attached.

Wolpert teaches to rearrange the motion transmitting element 14 to be disposed *wholly instead of partially* within the cab space in order to cause a swiveling of the pedal 8 toward the front wall 4, thus away from the foot space at the front of the vehicle to decrease the likelihood of injuries to the feet of the driver. See Wolpert, column 2, lines 24-31, and column 4, lines 28-52.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange Bayer's motion transmitting element to be disposed *wholly*

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*instead of partially* within the cab space in order to cause a swiveling of the pedal 8 toward the front wall 4, thus away from the foot space at the front of the vehicle to decrease the likelihood of injuries to the feet of the driver as suggested by Wolpert.

Regarding claim 2, Bayer's motion-transmitting element is an elongated flexible element 10.

Regarding claim 3, Bayer's motion-transmitting element is a metal cable 10.

Regarding claim 5, Bayer's motion-transmitting element 10 is rigidly fixed both to the pedal arm 22 and to the lever 4.

Regarding claim 8, Bayer teaches a brake pedal arrangement in a vehicle cab space space, said arrangement comprising:

a brake pedal arm 22 pivotally connected to the vehicle at a pivot point 24 located on the brake pedal arm 22, the pivot point 24 being positioned between an upper end 18 and a lower end (at 22 in Fig. 1) of the brake pedal arm 22; and

a motion-transmitting element 10 disposed *partially* within the cab space and being connected between the brake pedal arm 22 and a pedal actuated operating device 4, 2, the motion-transmitting element 10 supporting tensile forces imposed thereupon (*i.e.*, when the foot plate is moved downwardly as shown by solid line position in Fig. 1), and non-fixedly collapsing under compressive forces imposed thereupon (*i.e.*, when the foot plate is moved upwardly as shown in dashed line position in Fig. 1).

Wolpert teaches to rearrange the motion transmitting element 14 to be disposed *wholly instead of partially* within the cab space in order to cause a swiveling of the pedal 8 toward the front wall 4, thus away from the foot space at the front of the vehicle to decrease the likelihood

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of injuries to the feet of the driver. See Wolpert, column 2, lines 24-31, and column 4, lines 28-52.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange Bayer's motion transmitting element to be disposed *wholly instead of partially* within the cab space in order to cause a swiveling of the pedal 8 toward the front wall 4, thus away from the foot space at the front of the vehicle to decrease the likelihood of injuries to the feet of the driver as suggested by Wolpert.

Regarding claim 9, Bayer's motion-transmitting element comprises a cable 10.

Regarding claim 10, Bayer's motion-transmitting element comprises a bendable member 10.

Regarding claim 11, Bayer's motion-transmitting element 10 comprises a telescoping member since the element 10 is slid back and forth (telescope) within another element, i.e., a conduit 12.

Regarding claim 12, Bayer's telescoping member 10 is pivotally connected to the brake pedal arm 22.

Regarding claims 13 and 15 are drawn to Applicant's embodiment of Fig. 2. Bayer substantially teaches Applicant's embodiment in Fig. 1. Applicant explicitly admits that Applicant's embodiment of Fig. 1 and Applicant's embodiment of Fig. 2 are obvious variants in Paper No. 10. See fifth paragraph on page 2 of the restriction on August 21, 2002 and *In re Lee*, *supra*.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to weld at least one end of the telescoping member (motion transmitting

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element) of Bayer to the brake pedal arrangement of Bayer modified by Wolpert as explicitly admitted by the Applicant that Applicant's welding embodiment of Fig. 1 is an obvious variant of Applicant's embodiment of Fig. 2.

Regarding claim 14, Bayer's motion-transmitting element 10 is fixed at least at one end thereof between the brake pedal arm 22 and the pedal actuated operating device 2, 4.

Regarding claim 16, Bayer's motion-transmitting element 10 is pivotally connected at least at one end thereof between the brake pedal arm 22 and the pedal actuated operating device 2, 4.

Regarding claim 17, Bayer's pedal actuated operating device comprises a pressure actuated servo unit 2 for affecting brake pressure application.

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1, 2, 5, 6, 8, 10, 14, and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Wolpert (US Patent No. 6,082,219 filed on February 20, 1998).

Regarding claim 1, Wolpert teaches a pedal arrangement in a vehicle cab space 5, said arrangement comprising:

- a support 11 fixed in the cab space 5 (Fig. 2);

- at least one pedal arm 8, 20 having two ends 8 and 10, wherein the pedal arm 8, 20 is journaled in the support 11 for pivoting about a pivot axis 13 spaced between the two ends 8 and 20 of the pedal arm 8, 20;

- a foot plate (unnumbered) fixed to a first portion 8 of the pedal arm 8, 20 on one side of the pivot axis 13;

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a motion-transmitting element 14 disposed wholly within the cab space 5 (Figs. 1 and 2), wherein the motion-transmitting element 14 is joined firstly to a second portion 20 of the pedal arm 8, 20 on the other side of the pivot axis 13 from the foot plate and wherein the motion-transmitting element 14 is joined secondly to a pivotally mounted lever 15 that is configured so that pivotation thereof actuates an operating device 10; and

wherein the motion-transmitting element 14 is disposed so that the distance between the motion-transmitting element's respective attachment points (Fig. 2) to the pedal arm 8 and the lever 15 is maintained at least substantially constant when there is a tensile force on the element 14 (i.e., when the foot plate is moved downwardly as shown by dashed line position in Fig. 2) and is allowed to be shortened when there is compressive force on the element 14 (i.e., when the foot plate is moved upwardly as shown in solid line position in Fig. 2); and

wherein the motion-transmitting element 14 is rigidly fixed to at least one of the pedal arm 20, 8 and the lever 15, and is pivotally joined to the other of the pedal arm 8 and the lever 15.

Claim 1 and other claims below are anticipated by Wolpert. On the one hand, Wolpert teaches each claimed element and its functional statement. On the other hand, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). On the other hand, it is well established that: (a) a

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claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art teaches all the structural limitations of the claims. *Ex parte Masham*, 2 USPQ2d 1647 (BPAI 1987).

Regarding claim 2, the motion-transmitting element is an elongated flexible element 14. The element 14 of Wolpert is inherently *flexible* since virtually anything will be flexed if enough pressure is applied to it. See the term "flexibility" in *Fredman v. Harris-Hub Co., Inc.*, 163 USPQ 397 (DC 1969).

Regarding claim 5, the motion-transmitting element 14 is rigidly fixed both to the pedal arm 20, 8 and to the lever 15.

Regarding claim 6, the lever 15 is joined to a rocker arm 16, which, when the lever 15 is pivoted, acts on an actuator rod 17 for a brake servo unit 10, which is located on the outside of an intermediate wall 4 on the inside of which the support 11 is located spaced from the intermediate wall 4 (Figs. 1 and 2).

Regarding claim 8, Wolpert teaches a brake pedal arrangement in a vehicle cab space 5, said arrangement comprising:

a brake pedal arm 20, 8 pivotally connected to the vehicle 1 at a pivot point 13 located on the brake pedal arm 20, 8, the pivot point 13 being positioned between an upper end 20 and a lower end 8 of the brake pedal arm 20, 8; and

a motion-transmitting element 14 disposed wholly within the cab space 5 and being connected between the brake pedal arm 20, 8 and a pedal actuated operating device 10, 12, etc., the motion-transmitting element 14 supporting tensile forces imposed thereupon (i.e., when

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the foot plate is moved downwardly as shown by dashed line position in Fig. 2), and non-fixedly collapsing under compressive forces imposed thereupon (i.e., when the foot plate is moved upwardly as shown in solid line position in Fig. 2).

Regarding claim 10, the motion-transmitting element comprises a bendable member 14. The element 14 of Wolpert is inherently *bendable* since virtually anything will be bent if enough pressure is applied to it. See the term "flexibility" in *Fredman v. Harris-Hub Co., Inc., supra*.

Regarding claim 14, the motion-transmitting element 14 is fixed at least at one end thereof between the brake pedal arm 20, 8 and the pedal actuated operating device 10, 12, etc.

Regarding claim 16, the motion-transmitting element 14 is pivotally connected at least at one end thereof between the brake pedal arm 20, 8 and the pedal actuated operating device 10, 12, etc.

Regarding claim 17, the pedal actuated operating device comprises a pressure actuated servo unit 10 for affecting brake pressure application.

Regarding claim 18, Wolpert teaches a pedal arrangement for a vehicle cab space 5, said arrangement comprising:

- a pivot axis 13 connected to a support 11 fixed within the vehicle cab space 5;

- a pedal arm 8, 20 arranged to be pivotally connected to the pivot axis 13 at a pivot point 13 located on the pedal arm 8, 20, the pivot point 13 being positioned between an upper end and a lower end of the pedal arm 8, 20;

- a pedal actuated operating device 10, 12, etc. including a bracket 12 fixed within the vehicle cab space 5, a rocker arm 16 journaled in the bracket 12 (at 19 in Fig. 2) and a lever arm 15 connected to the rocker arm 16; and



a motion-transmitting element 14 disposed wholly within the cab space 5 and being connectable between the pedal arm 8, 20 and the lever arm 15 of the pedal actuated operating device 10, 12, etc., wherein the motion-transmitting element 14 supports tensile forces imposed upon the motion-transmitting element 14, and wherein the motion-transmitting element 14 non-fixedly collapses under compressive forces imposed upon the motion transmitting element 14.

Regarding claim 19, the motion transmitting element 14 is a bendable member 14.

Regarding claim 20, the motion transmitting element 14 is rigidly fixed to at least one of the pedal arm 8, 20 and the lever arm 15, and is pivotally joined to the other of the pedal arm 8, 20 and the lever arm 15.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolpert.

Claim 15 is drawn to Applicant's embodiment of Fig. 2. Wolpert teaches Applicant's embodiment in Fig. 1. Applicant explicitly admits that Applicant's embodiment of Fig. 1 and Applicant's embodiment of Fig. 2 are obvious variants in Paper No. 10.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to weld at least one end of the motion transmitting element 14 of Wolpert to the brake pedal arm as explicitly admitted by the Applicant that Applicant's welding embodiment of Fig. 1 is an obvious variant of Applicant's embodiment of Fig. 2. See fifth paragraph on page 2 of the restriction on August 21, 2002, *In re Lee*, MPEP 803, and cases cited in *Anything You Say Can Be Used Against You*, *supra*.

13. Applicant's arguments filed May 7, 2004 have been fully considered but they are not persuasive.

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**37 CFR § 1.98(b)**

The information disclosure statement filed on January 16, 2004 has been received and considered.

**Drawings**

The deletion of prior Fig. 3 and the substitution of new Fig. 3 comprising a schematic block diagram have been received. However, Applicant is required to submit the replacement sheets of drawings in accordance with the new Information on How to Effect Drawing Changes above. Upon Applicant's resubmission of amended Figs. 1-3 by replacement sheets, the amended drawings will be approved.

**35 USC 112, First Paragraph**

The rejection under 35 USC 112, first paragraph, is withdrawn in view of Applicant's submission of new Fig. 3 comprising a schematic block diagram to represent the telescoping element.

**35 USC 102(b)**

The previous rejection of claims 1-3, 5, 8-12, 14, 16 and 17 under 35 USC 102(b) based on Bayer is withdrawn in view of Applicant's amendment to change "a vehicle cab" to "a vehicle cab space" in the independent claims 1, 8, and 18. However, this amendment necessitates new ground of rejection under 35 USC 103 as seen above.

**Bayer**

Applicant argues that "a motion-transmitting element disposed wholly within the cab space is neither taught or fairly suggested by Bayer on page 14 of the Amendment. The Examiner respectfully submits that it is well settled that the rearrangement of parts would have

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been an obvious matter of choice in design as seen in legal precedents cited in MPEP § 2144.04 and *In re Chu, supra*. On the other hand, Wolpert expressly suggests arranging the motion transmitting element wholly within the cab space to avoid injury to the driver as seen in, e.g., column 2, lines 24-31, and column 4, lines 28-52. Therefore, the rejection under 35 USC 103 is necessitated in this Office action.

### Wolpert

Applicant contends:

The Examiner relies here upon a notion that a particular rod in the Wolpert reference, when subjected to sufficient compressive force, will inherently shorten. The Applicant does not dispute this characterization of Wolpert's rod. *The Applicant overcame this objection, however, by modifying the independent claims to specify that the Applicant's corresponding element is "non-fixedly shortened when there is compressive force on the element." That is, the shortening of the element in response to application of compressive force results in a nonpermanent shortening of the element; i.e., a shortening that is not fixed.* The Examiner, however, argues that this does not successfully distinguish over Wolpert. The Examiner argues that Wolpert's Figures 1 and 2 "plainly show that the rod 14 is moved as seen by the phantom or broken line position of the rod 14 or the pedal 8. Therefore, Wolpert's rod is transparently non-fixed, i.e., axially displaced as expressly described in line 28 et seq., (column 4)." The Applicant has not modified the claims, however, to aver such a position regarding axial displacement. The Examiner's point, therefore, misses the point. *The Applicant has modified the claims to make clear that the shortening of the motion-transmitting element is shortened in a non-fixed manner in response to compressive force.* To the extent that Wolpert's rod is shortened by compression, the change is essentially permanent. This result does not change regardless of whether Wolpert's rod undergoes axial displacement, as such axial displacement is irrelevant to the shortening of the rod in question. (Emphasis added).

The Examiner respectfully submits that Wolpert's claim 1 expressly claims "a dimensionally stable transmitting rod." Merriam Webster's Collegiate Dictionary 1999 defines

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“stable” as “not changing or fluctuating.” In other words, Wolpert teaches that *the shortening of Wolpert's motion transmitting element 14 in response to application of compressive force results in a shortening that is not fixed* in the same manner as Applicant's motion transmitting element because the dimension of Wolpert's element 14 is “stable” or “unchanged.” In fact, Applicant's motion transmitting element is substantially identical or similar to the one of Wolpert. Therefore, Wolpert's motion transmitting element is expected to behave similarly to the one of Applicant. *In re Merck & Co., Inc.*, 231 USPQ 375 (CAFC 1986) and *In re King*, 231 USPQ 136 (CAFC 1986). Simply put, Applicant's modification in the claims does not overcome the rejection under 35 USC 102 based on Wolpert. Thus, this rejection is reiterated in the instant Office action.

14. Applicant's arguments with respect to claims 1-3, 5, and 8-17 have been considered but are moot in view of the new ground(s) of rejection.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

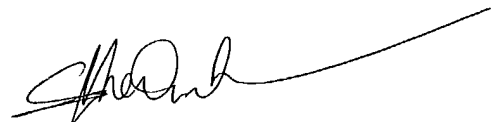
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 703-308-3221. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong

June 30, 2004



Vinh T. Luong  
Primary Examiner

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 Offenlegungstag: 21. April 1983

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ATTACHMENT POINT

UPPER END SECOND PORTION

Fig. 1

16 FRONTAL WALL

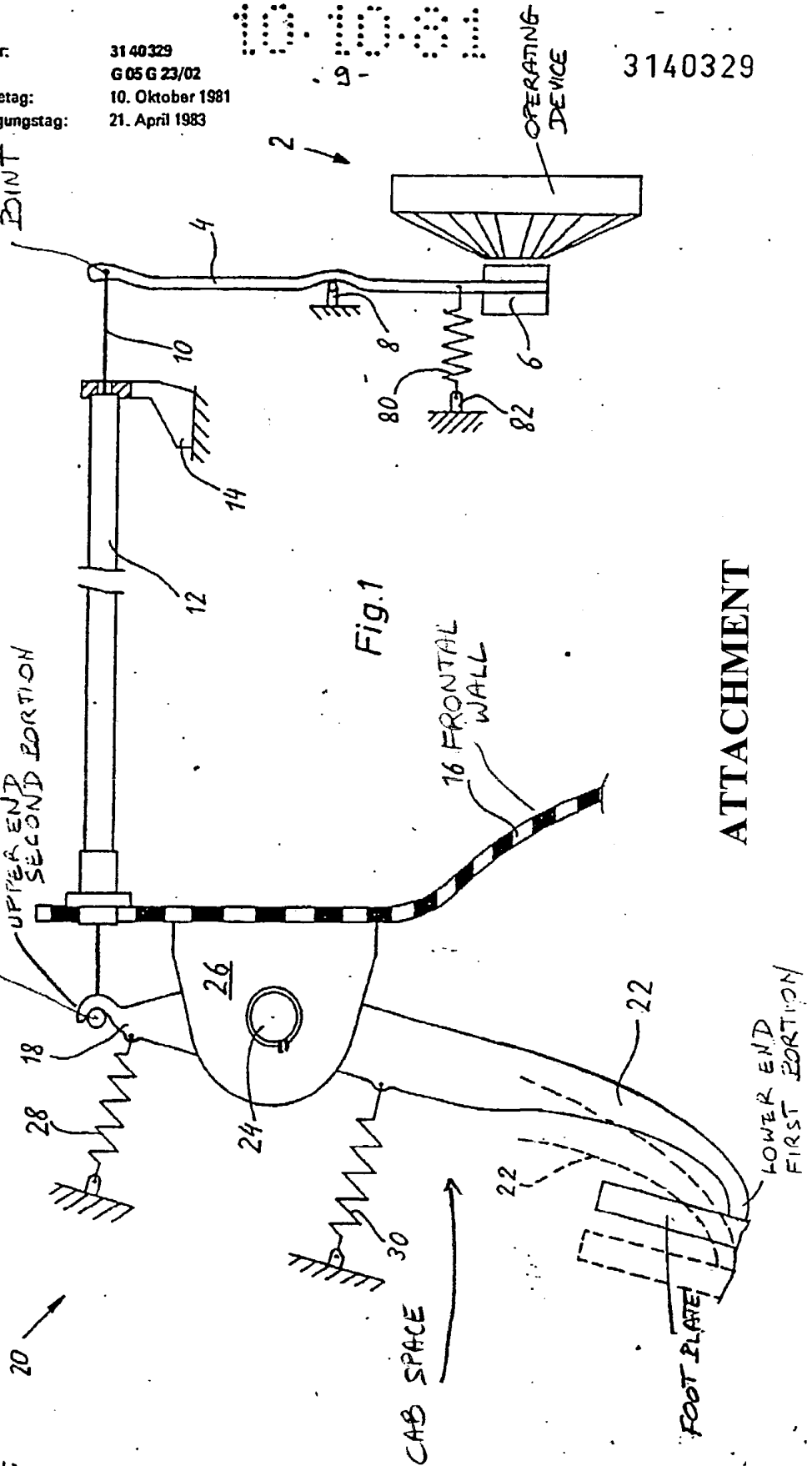
ATTACHMENT

LOWER END FIRST PORTION

20

CAB SPACE

FOOT PLATE



31 40 329 DE

USPTO 2004-1576

Translated from the German

FEDERAL REPUBLIC OF GERMANY  
GERMAN PATENT OFFICE

**Offenlegungsschrift**  
**DE 31 40 329**

IPC: G 05 G 23/02  
B 60 K 23/02

Date of application: October 10, 1981

Date of making available to the public by printing or similar process of the unexamined 'Offenlegungsschrift', on which no grant has taken place on or before the said date: April 21, 1983

Applicant: Audi NSU Auto Union AG, Neckarsulm, Germany

Patent of addition to P 31 29 603.3

Inventor: Josef Bayer et al.

[Title in German of the object of the invention:]

**Selbstnachstellende Betätigungsvorrichtung**

SELF-ADJUSTING CONTROL DEVICE

(Patent of Addition to Patent Application P 31 29 603.3)

P a t e n t   C l a i m

1. Self-adjusting control [activation] device, in particular for a clutch control in motor vehicles, having a pivotably supported control lever, which is connected fractionally to a second lever over the course of the activation, whereby in accordance with patent application P 31 29 603.3, the activation or control lever and the second lever are coaxially supported,

and can be displaced with respect to one another, and on their adjacent frontal sides have means, which can fractionally [i.e. without interruption of the force flux] be forced into engagement with one another, and the relative displacement between the control lever and the second lever is brought about by means of slanting guiding surfaces on the control lever, which guiding surfaces run up against a fixed supporting part at corresponding guiding surfaces, characterized by additional slanting guiding surfaces (84, 86), which again fictionally force the control lever (clutch pedal 22) in its reverse motion - shortly before its neutral position is attained - into engagement with the second lever (18).

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The invention pertains to a self-adjusting control device, in particular for a clutch control in motor vehicles, in accordance with the preamble of the patent claim.

The generic control device, described in the principal patent application P 31 29 603.3, is characterized by a small, structural input and design space, and ensures an automatic, reliable readjustment or compensation, e.g., when the clutch is activated in motor vehicles. Because of the fact that in the case



of this control or activation in the neutral position of the clutch pedal, the frictional connection with the second lever is cancelled, it is not possible to provide a specified clearance in the transmission means, permanently connected to the second lever. However, a clearance of this kind is particularly advantageous in the case of the clutch control, because, as a result of this, a permanent resting of the clutch-release bearing against the clutch, rotating with the motor, can be prevented. A clutch-release bearing, which is permanently bearing against or adjacent, is subjected to an elevated wear, and transmits, eventually, driving noises into the interior of the motor vehicle.

Therewith, it is an object of the invention to refine in such a way the control or activation device - forming the basis of the principal patent application - with the help of simple means that a defined or specified clearance can be produced in the neutral position of the activation or control lever.

In accordance with the invention, the set objective is achieved with the characteristic features of the patent claims.

After the second lever - shortly before the neutral position of the activation lever, respectively of the clutch pedal - is again fictionally connected to the activation lever, resp. clutch pedal, due to the additional inclined guiding surfaces, it is dragged back by this by a structurally definable remaining path into the neutral position, as a result of which the transmission

means, connected to the second lever, and finally, the clutch-release bearing, is reset back by a specified amount.

When the clutch is subsequently activated or released, the frictional connection between clutch pedal and second lever is first of all disengaged, by moving the clutch pedal out of its neutral position, and when one steps more on the pedal, as described in the principal patent, the connection is again produced so that the clutch can be released. The actual readjustment process takes place in the relatively short time interval, in which the clutch pedal and the second lever are separated one from another as a result of driving or operationally.

Additional advantageous features of the invention can be deduced from the description of an exemplified embodiment, which follows. The drawing shows in

Fig. 1 - a diagrammatic representation of a control or activation device in a clutch control system for motor vehicles,

Fig. 2 - a perspective of the activation device, and

Fig. 3 a cross-section through the activation device along line III - III of Fig. 2.

Fig. 1 shows a clutch control for motor vehicles, having a clutch 2, upon which a two-armed clutch-release lever 4 acts by way of a clutch-release bearing 6. The clutch-release lever 4 is supported on a thrust bearing 8, which is rigidly connected on the casing, while a Bowden wire [Bowden control cable] engages on

its free end, which Bowden control cable is guided in a bushing 12. On the one hand, the bushing or collar 12 is supported on a console 14, which is rigidly connected to the casing, and on the other hand, it is supported on the frontal wall 16 of the motor vehicle. On the other hand, the Bowden control cable is suspended on the end of a lever 18 of a clutch-control device 20.

The lever 18 is coaxially pivoted to an activation lever, respectively clutch pedal 22 by means of a bolt 24. The bolt 24 is accommodated in a console 26, which is attached on the frontal wall 16. A spring 28, 30, which pull[s] the lever 18 and the clutch pedal 22 in their neutral position, engage[s] on the lever 18 and the clutch pedal 22, respectively. Moreover, yet another additional spring 80, supported on a thrust bearing 82, which spring strives to lift up the clutch-release bearing 6 from the clutch 2, engages on the clutch-release lever 4. However, the force of the spring 80 is smaller than the retraction force of the spring 28, engaging on the lever 18.

As can be deduced from Figs. 2 and 3, the clutch pedal 22 supports a bearing bushing or sleeve 32, and can axially be displaced with respect to the lever 18 by the path  $s$ . The lever 18 is rigidly connected to the bolt 24 by means of a clamping pin 34 whereby by means of safety rings, the bolt 24 is retained on both sides in the legs 38, 40 of the console 26 in such a way that it cannot be axially displaced.

On the front-side annular surfaces of the bearing bushing 32

and of the lever 18, which annular surfaces are facing each other, there are incorporated radial tooth systems. 42, 44, which materialize a form-locking [closed-by configuration] connection between the clutch pedal 22 and the lever 18 when the bearing bushing 32 is axially displaced to the right as depicted in the drawing. The displacement path  $s$  is insignificantly longer than the height of the teeth of the radial tooth systems 42, 44.

On the opposite front-side of the bearing bushing 32, there are integrally molded two diametrically opposite guiding ramps 46 (only one guiding ramp 46 can be discerned), which - when the clutch pedal 22 is in the position, drawn with solid lines in Fig. 1 - protrude into adjacent recesses 48. In a manner, deviating from the principal patent application, this position of the clutch pedal 22 does not correspond to the neutral position of the clutch pedal 22, which is diagrammatically represented with the help of dotted lines, but to the neutral position plus the structurally parametrized clearance.

The recesses 48 are directly integrated in the leg of the console 26, which is used as supporting part. On the guiding ramps 46 and the recesses 48, there are designed inclined surfaces 50, 52, which rest against each other, and, when the clutch pedal executes an oscillatory motion out of the position drawn with solid lines, forcefully bring about an axial displacement by the path  $s$  whereby the guiding ramps 46 slide on the frontal surface of the leg 40.

Inside the bearing bushing 32, there is provided an annular space 58, which is open with respect to lever 18, into which space a helically wound compression [helical] spring 60 is inserted. On the one hand, the compression spring 60 is supported on the bearing bushing 32, and, on the other hand, it is supported on the lever 18, and correspondingly tightens or tensions the bearing bushing 32 against the leg 40.

Additional inclined guiding surfaces [sic] 84 are designed on the guiding ramps 46, which guiding surfaces interact with adjacent guiding surfaces 86 of the recesses 48, and displaces [sic] the clutch pedal 22 - when it moves from the position, shown in solid lines in Fig. 1, into the neutral position (dotted lines) - again to the right, as depicted in the drawing, and, therewith, forces [sic] it into a form-fitting [form-locking or positive] engagement with the lever 18. In the remaining return path of the clutch pedal 22 up to its ultimate neutral position, which is defined by means of a limit stop 88, interacting with a console 26, the lever 18 is moved backwards, as a result of which the clutch-release bearing 6 is lifted from the clutch 2.

The automatic resetting or readjustment of the clutch control occurs in the position, depicted in Figs. 1 and 2, in which position the operational connection between the coupling pedal 22 and the lever 18 is disengaged. In the said position, there prevails the force of the spring 28, which pulls the lever 18, and, in doing so, while overcoming the force of the spring

80, employs the clutch-release bearing 6 at the clutch 2.

In doing so, the position of the lever 18, corresponding to the wear in the transmission means, respectively in the clutch 2, is readjusted to the position of the clutch pedal, defined by the recess 48, or the guiding ramps 46, respectively.

It would still be mentioned that due to their opposite force action, the springs 28, 30 build up only an inner force between the lever 18 and the clutch pedal 22 in the case of a form-locking [form-fitting or positive] connection so that in that case the force of the spring 80 prevails, and acts as a conventional clutch-release spring.

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